

Remarks

The Office Action mailed August 29, 2003 and made final has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-19 are now pending in this application of which Claims 1-6 and 11-19 have been allowed. Claims 7-10 stand rejected. Claim 7 has been amended. It is respectfully submitted that the presently rejected claims define allowable subject matter.

The rejection of claims 7 and 8 under 35 U.S.C. § 102(e) as being anticipated by Bassler et al. (U.S. Patent No. 6,379,184) is respectfully traversed.

Bassler et al. describe a connector (110) wherein an impedance of the connector may be set so that it emulates an impedance of a cable to which it is connected. The connector (110) includes housing (112) formed from a dielectric material and having leaf portions (114a), (114b) extending out from a body portion (116). The lower leaf portion (114a) includes a series of grooves or slots (118), and the upper leaf portion (114b) includes similar grooves (120). The grooves (118) and (120) are adapted to receive terminals (119). As described by Bassler et al., the terminals (119) include tunable "triplets" (A) having two signal terminals (140) and (141) and a single ground terminal (150). The signal terminals (140) and (141) are received in the slots (118) of the lower leaf (114a) of the housing body, and the ground terminal (150) is located on the upper leaf portion (114b). See Bassler et al. Col. 8, line 1 to Col. 9, line 6 and Figure 2.

Claim 7 recites "an apparatus for controlling impedance within an electrical connector assembly including a housing and a plurality of signal contacts and a ground contact substantially coplanar with said signal contacts, said signal contacts being arranged in a differential pair, said apparatus comprising an impedance tuner formed of a dielectric material different than air and adapted to be interchangeably secured in said housing, said impedance tuner including dielectric isolation ribs along a side of said impedance tuner mating with the signal contacts, said impedance tuner being positioned proximate the signal and ground contacts,

wherein signal contacts of the differential pair are separated from the ground contact by one of said isolation ribs”.

It is respectfully submitted that Bassler et al. do not describe the apparatus recited in claim 7. Specifically, Bassler et al. do not describe or suggest an impedance tuner for a connector that includes a housing having a plurality of signal contacts and a ground contact substantially coplanar with the signal contacts and wherein the signal contacts of the differential pair are separated from the ground contact by one of the isolation ribs. Rather, Bassler et al. describe signal contacts positioned in grooves in the lower leaf surface (114b) of the housing (112) and ground contacts positioned in grooves of an opposing upper leaf surface (114a) of the housing. As arranged, the signal contacts and ground contact are not coplanar as claim 7 recites.

Claim 7 is therefore submitted to be patentable over Bassler et al.

Claim 8 depends directly from independent claim 7. When the recitations of claim 8 are considered in combination with the recitations of claim 7, Applicants submit that dependent claim 8 likewise is patentable over Bassler et al.

For the reasons set forth above, Applicants respectfully request that the Section 102(e) rejection of claims 7 and 8 be withdrawn.

The rejection of claims 9-10 under 35 U.S.C. § 103(a) as being unpatentable over Bassler in view of Fogg et al. (U.S. Patent No. 5,975,960) is respectfully traversed.

Fogg et al. describe a modular contact assembly (10) including a housing (15) and a contact insert (20) adapted to receive a plurality of contacts (25) and non-ohmic plates (30), (32). Plate receptacles (54), (56) extend only partly through the insert (20) and contact channels (58) are defined in the insert (20) for receiving the contacts (25). It is clear from Fogg et al. Figure 2 that the plate receptacles and the contact channels (58) are located on a single face of the insert (20). It is evident that the plate receptacles are interior passages in the insert (20) extending longitudinally through the insert (20).

Claims 9 and 10 depend from claim 7 which recites “an apparatus for controlling impedance within an electrical connector assembly including a housing and a plurality of signal contacts and a ground contact substantially coplanar with said signal contacts, said signal contacts being arranged in a differential pair, said apparatus comprising an impedance tuner formed of a dielectric material different than air and adapted to be interchangeably secured in said housing, said impedance tuner including dielectric isolation ribs along a side of said impedance tuner mating with the signal contacts, said impedance tuner being positioned proximate the signal and ground contacts, wherein signal contacts of the differential pair are separated from the ground contact by one of said isolation ribs”.

Neither Bassler et al. nor Fogg et al., considered alone or in combination, describe nor suggest an impedance tuner for a connector, wherein the connector includes a housing having a plurality of signal contacts and a ground contact substantially-coplanar with the signal contacts and wherein the impedance tuner is positioned proximate the signal and ground contacts, such that the signal contacts of the differential pair are separated from the ground contact by one of the isolation ribs. Rather, Bassler et al. describe signal terminals positioned in grooves of a lower leaf of a housing and ground terminals positioned in grooves of an opposing upper leaf of the housing as opposed to the coplanar arrangement recited in claim 7. Fogg et al. make no mention of isolating signal and ground contacts.

Collectively Bassler et al. in view of Fogg et al. fail to teach or suggest each limitation of claim 7. Accordingly, Applicants submit that claim 7 is patentable over Bassler et al. in view of Fogg et al.

Claims 9-10 depend from independent claim 7. When the detail recitations of claims 9-10 are considered in combination with the recitations of claim 7, Applicants submit that dependent claims 9-10 likewise are patentable over Bassler et al. in view of Fogg et al.

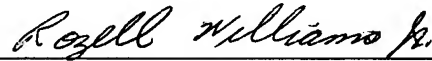
For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claims 9-10 be withdrawn.

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In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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